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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/805,124	03/08/2001	Gary Tapperson	F292.12-0014	2637
45372	7590	01/10/2008		
MARSHALL, GERSTEIN & BORUN LLP (FISHER)			EXAMINER	
233 SOUTH WACKER DRIVE			LUU, LE HIEN	
6300 SEARS TOWER				
CHICAGO, IL 60606			ART UNIT	PAPER NUMBER
			2141	
			MAIL DATE	DELIVERY MODE
			01/10/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/805,124

Applicant(s)

TAPPERSON ET AL.

Examiner

Le H. Luu

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10/22/2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8, 16-23, 31-36 and 44-56 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8, 16-23, 31-36 and 44-56 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- 1) ☐ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

1. Claims 1-8, 16-23, 31-36, and 44-56 are presented for examination.
2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-8, 16-23, 31-36, and 44-56 are rejected under 35 U.S.C. § 103 (a) as being unpatentable McCain et al. (McCain) patent no. 6,129,449, in view of Eidson et al. (Eidson) patent no. 5,586,305.

4. As to claim 1, McCain teaches the invention as claimed, including a distributed industrial process control system (figures 1- 3) comprising:

a central control including a computer system, having a controller that produces a control signal for a field device and having user input/output (I/O) for providing an interface between the computer system and a user, and a wireless communication link associated with the computer system for transmitting and receiving process control information, including the control signal and secondary information (col. 3 line 62 - col. 4 line 27); and

a distributed network of industrial process control field devices, at least one of the field devices being under the control of the controller for transmitting and receiving process control and secondary information between the field device and the controller to

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provide wireless communication between the computer system and the field device (col. 3 line 62 - col. 4 line 27; col. 9 line 64 – col. 10 line 12; wireless communication between the computer system and the field device via wireless communication link of the controller).

However, McCain does not explicitly teach the process control field device having an associated wireless communication is communicatively disposed between the field device and the controller.

Eidson teaches transducer element and transducer module can be connected using dedicated communication link such as hardwire, wireless, or IR link (Eidson, figures 5, 8; col. 3 line 24 – col. 4 line 9; col. 9 lines 48-65).

It would have been obvious to one of ordinary skill in the Data Processing art at the time of the invention to combine the teachings of McCain and Eidson to disposed wireless communication link between the field device and the controller to allow wireless communication of both process control information and secondary information between the controller and the field device because it would allow the field device to be mobile and located at any distance to gather data.

5. As to claim 2, McCain teaches the controller is adapted to control field devices of the distributed network based upon commands from the computer system and for providing data to the computer system based upon signals received from the field devices of the distributed network (Abstract; col. 2 lines 12-23 and lines 51-65).

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6. As to claims 3-4, McCain and Eidson teach the field devices and the wireless communication link associated with the field devices are powered from the distributed network (McCain, col. 3 line 62 - col. 4 line 27. Eidson, figures 5, 8; col. 3 line 24 – col. 4 line 9; col. 9 lines 48-65. In addition, applicant admitted in page 2 of the background of the invention that field devices use two or four wires are inherently powered from the distributed network).

7. As to claims 5-6, McCain and Eidson teach the distributed network includes a field module in communication with a plurality of field devices and a wireless communication link associated with the field module to communicate with the plurality of field devices, and the distributed network includes a network bridge and a wireless communication link associated with the network bridge to communicate with field devices connected to control networks serviced by the network bridge (McCain, col. 4 lines 5-12. Eidson, figures 5, 8; col. 3 line 24 – col. 4 line 9; col. 9 lines 48-65).

8. As to claim 7, McCain teaches the secondary information includes diagnostic data (col. 1 lines 41-47; col. 9 lines 34-38).

9. As to claim 8, McCain teaches the central control is capable of communicating with the field device through the wireless communication links for monitoring process variables (col. 9 line 64 - col. 10 line 11).

10. As to claim 44, McCain and Eidson teach the wireless communication link associated with the at least one of the field devices is disposed on a field module communicatively connected to the field devices via a hard-wire communication link (figure 2; col. 3 line 62 – col. 4 line 27; col. 9 line 64 – col. 10 line 2. Eidson, figures 5, 8; col. 3 line 24 – col. 4 line 9; col. 9 lines 48-65).

11. As to claims 45, Eidson teaches the wireless communication link is disposed on the field devices (figures 5, 8; col. 3 line 24 – col. 4 line 9; col. 9 lines 48-65).

12. As to claim 46, McCain and Eidson teach the wireless communication link associated with the at least one of the field devices is adapted to communicate directly with the wireless communication link associated with the computer system link (McCain, figure 2; col. 3 line 62 – col. 4 line 27; col. 9 line 64 – col. 10 line 2; Eidson, figures 5, 8; col. 3 line 24 – col. 4 line 9; col. 9 lines 48-65).

13. As to claims 49-50, McCain and Eidson teach the process control information is periodically produced and the secondary information is non-periodically produced; wherein the process control information is periodically transmitted via the wireless communication link and the secondary information is transmitted via the wireless communication link interspersed between some of the periodically transmitted process control information (McCain, col. 9 line 64 – col. 10 line 12; Eidson, figures 5, 8; col. 3 line 24 – col. 4 line 9; col. 6 line 59 – col. 7 line 15; col. 9 lines 48-65).

14. As to claims 51-52, McCain and Eidson teach the process control information includes parameter values specified by a standard control system communication protocol and the secondary information includes parameter values not specified by a standard control system communication protocol; wherein the standard control system communication protocol is a Fieldbus protocol (McCain, Figure 3, col. 2 lines 51-65; col. 3 line 62 - col. 4 line 27; Eidson, figures 5, 8; col. 3 line 24 – col. 4 line 9; col. 6 line 59 – col. 7 line 15; col. 9 lines 48-65; Applicant's admitted prior art in the background of the invention).

15. As to claims 53-56, McCain and Eidson teach the secondary information is transmitted to the field device via the wireless communication link to access a function of the field device other than a control function that directly affects a physical process parameter; wherein the secondary information transmitted to the field device includes configuration information, calibration information, and programming information; wherein the secondary information is produced by the field device and transmitted to the process controller and wherein the secondary information includes diagnostic information or error code information (McCain, col. 9 line 64 – col. 10 line 12; Eidson, figures 5, 8; col. 3 line 24 – col. 4 line 9; col. 6 line 59 – col. 7 line 15; col. 9 lines 48-65).

16. Claims 16-23, 31-36, and 47-48 have similar limitations as claims 1-8 and 44-46; therefore, they are rejected under the same rationale.

17. In the remarks, applicant argued in substance that

(A) Prior art does not teach a wireless communication link disposed between a controller and a field device that communicates both process control information and secondary information between the controller and the field device.

As to point (A), McCain teaches a distributed network of industrial process control field devices, at least one of the field devices being under the control of the controller for transmitting and receiving process control and secondary information between the field device and the controller to provide wireless communication between the computer system and the field device (col. 3 line 62 - col. 4 line 27; col. 9 line 64 – col. 10 line 12; wireless communication between the computer system and the field device via wireless communication link of the controller).

However, McCain does not explicitly teach the process control field device having an associated wireless communication is communicatively disposed between the field device and the controller.

Eidson teaches transducer element and transducer module can be connected using dedicated communication link such as hardwire, wireless, or IR link (Eidson, figures 5, 8; col. 3 line 24 – col. 4 line 9; col. 9 lines 48-65).

It would have been obvious to one of ordinary skill in the Data Processing art at the time of the invention to combine the teachings of McCain and Eidson to disposed wireless communication link between the field device and the controller to allow wireless communication of both process control information and secondary information between the controller and the field device because it would allow the field device to be mobile and located at any distance to gather data.

(B) Prior art does not teach limitations in new claims 49-56.

As to point (B), please refer to items 13-15.

18. Office personnel are to give claims their broadest reasonable interpretation in light of the supporting disclosure. In re Morris, 127 F.3d 1048, 1054-55, 44 USPQ2d 1023, 1027-28 (Fed. Cir. 1997). Limitations appearing in the specification but not recited in the claim are not read into the claim. In re Prater, 415 F.2d 1393, 1404-05, 162 USPQ 541, 550-551 (CCPA 1969). See also In re Zletz, 893 F.2d 319, 321-22, 13 USPQ2d 1320, 1322 (Fed. Cir. 1989) ("During patent examination the pending claims must be interpreted as broadly as their terms reasonably allow.... The reason is simply that during patent prosecution when claims can be amended, ambiguities should be recognized, scope and breadth of language explored, and clarification imposed.... An essential purpose of patent examination is to fashion claims that are precise, clear, correct, and unambiguous. Only in this way can uncertainties of claim scope be removed, as much as possible, during the administrative process.").

19. Limitations that are argued by applicant but are not in claimed language are not being considered by Examiner.

20. Applicant's arguments filed on 10/22/2007 have been fully considered but they are not deemed to be persuasive.

21. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time

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policy as set forth in 37 C.F.R. § 1.136(a).

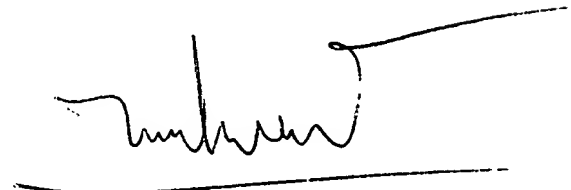
A SHORTENED STATUTORY PERIOD FOR RESPONSE TO THIS FINAL ACTION IS SET TO EXPIRE THREE MONTHS FROM THE DATE OF THIS ACTION. IN THE EVENT A FIRST RESPONSE IS FILED WITHIN TWO MONTHS OF THE MAILING DATE OF THIS FINAL ACTION AND THE ADVISORY ACTION IS NOT MAILED UNTIL AFTER THE END OF THE THREE-MONTH SHORTENED STATUTORY PERIOD, THEN THE SHORTENED STATUTORY PERIOD WILL EXPIRE ON THE DATE THE ADVISORY ACTION IS MAILED, AND ANY EXTENSION FEE PURSUANT TO 37 C.F.R. § 1.136(a) WILL BE CALCULATED FROM THE MAILING DATE OF THE ADVISORY ACTION. IN NO EVENT WILL THE STATUTORY PERIOD FOR RESPONSE EXPIRE LATER THAN SIX MONTHS FROM THE DATE OF THIS FINAL ACTION.

22. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Le H. Luu whose telephone number is 571-272-3884.

The examiner can normally be reached on 7:00am - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rupal Dharia can be reached on 571-272-3880. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



LE HIEN LUU
PRIMARY EXAMINER